Inquiry into Naval Shipbuilding in Australia

Submission to the Senate Foreign Affairs, Defence and Trade References Committee

Terms of Reference:

(a) The capacity of the Australian industrial base to construct large naval vessels over the long term on a sustainable basis

(b) The comparative economic productivity of the Australian shipbuilding industrial base and associated activity with other shipbuilding nations

(c) The comparative economic costs of maintaining, repairing and refitting large naval vessels throughout their useful lives when constructed in Australia vice overseas

(d) The broader economic development and associated benefits accrued from undertaking the construction of large naval vessels

Submission from: Austal Ships Pty Ltd

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Relevant Background on Austal

- Austal is Australia's largest builder of commercial ships, currently employing approximately 1,100 staff at three sites in Western Australia. In addition, approximately 400 staff are employed at the Austal USA shipyard in Mobile, Alabama, with plans to grow this workforce to over 1,000 staff by December 2006. Annual turnover is approximately A$350 million.
- Austal is regarded as a world leader in the design and construction of lightweight, high speed vessels manufactured from aluminium. The company is internationally competitive in this sector.
- Fast ferries and other lightweight commercial vessels built for export have, historically, represented the majority of Austal's business. Domestic sales have been primarily patrol vessels for government authorities, including the Australian Customs Service and Royal Australian Navy, as follows:

	Domestic sales	**Export sales**
Commercial vessels	8 vessels	110 vessels
Patrol / defence vessels	35 vessels	17 vessels

NB: Export sales includes vessels built at Austal's US shipyard for the US market

- As Austal currently has a very significant share of the available commercial vessel market, which is not expected to grow significantly, the largest potential for growth in its shipbuilding business lies in the patrol/defence sector. The primary drivers for this growth are:
    - increased participation in future Australian naval shipbuilding projects and an increased presence in the Australian naval sector; and
    - increased use of lightweight, high speed vessel technology in naval/defence applications worldwide.
- Austal is already providing its design and construction expertise in high speed vessels for the United States Navy's Littoral Combat Ship project. Austal is the ship designer and builder in one of two teams selected to participate in this project, which is anticipated to be worth approximately US$15 billion. A contract for an initial vessel has already been signed and construction is underway at Austal USA. It is anticipated that acceptance of this vessel

technology will lead to further projects being developed both in the US and by many other nations, resulting in considerable export potential for Austal.

Employee Relations

- Austal's success, and the ability to compete internationally, can be at least partly attributed to its employee relations model, which is based on a strong and direct relationship between the employer and the employee. The relationship between management and workforce is formalised by an Australian Workplace Agreement (AWA), which is underpinned by a recognition of mutual trust and respect. Issue resolution for any employee is via consultation with their supervisor. If the issue is not resolved to the employee's satisfaction the issue is escalated through the management structure until it is resolved. This may require intervention by the executive of the company.
- Employee prospects and remuneration are based on individual performance and contribution to the overall goals of the organisation and are not restricted by an industrial award. The sharing of company goals and profits with employees directly couples the interests of both parties.
- The success of Austal's employee relations model compared to an award based relationship, in terms of productivity and profitability, is well documented and has been confirmed by several case studies.

Comments on Inquiry's Terms of Reference

(a) The capacity of the Australian industrial base to construct large naval vessels over the long term on a sustainable basis

- For the purposes of this inquiry we have defined ***large*** vessels as those greater than 2,000 tonnes, and ***very large*** vessels as those greater than 10,000 tonnes. Australia has an extensive history of building vessels up to 4,100 tonnes and only a very limited history of building ships greater than 10,000 tonnes (Stalwart and Success, both built at Cockatoo Island in Sydney).
- The rationale for building naval ships in Australia is straightforward: Navy acquires the vessels that it needs (as agreed by government) and does not have to make technical and therefore operational compromises incurred by adopting the solutions of other countries. The Anzac frigates and Collins submarines are examples of Australia's decision to do this, and AWD's are likely to follow this pattern because of the importance and complexity of their combat capabilities. However, the amphibious ships are primarily heavy haulage vessels and their capabilities, while sophisticated, are less of a challenge than front line warships.
- The Australian shipbuilding industry does not currently have infrastructure and production personnel on a scale that would enable the construction of ***very large*** naval (or commercial) vessels.
- Were this capacity to be developed for a specific naval program then its long-term sustainability would, in the absence of significant ongoing Australian Government support[1], rely on the ability of industry to secure additional contracts for ***very large***, steel[2] vessels.

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[1] In the form of Government-funded contracts not open to international competition and/or subsidies or other direct fiscal support measures.

[2] Even if the infrastructure and workforce could subsequently be re-configured and re-trained for aluminium shipbuilding the demand for such vessels built in Australia will not be sufficient to support any significant increase over existing production capacity.

- Although Australian industry has proven itself to be highly competitive in the niche field of aluminium vessel design and construction, Austal believes that industry cannot successfully and sustainably compete in either the commercial or naval markets for ***very large*** steel ships, for the following reasons:

  Competitiveness in the Global Commercial Shipbuilding Market

  - Australia is world competitive in the construction of high speed aluminium vessels, where there is a clear lead in both technology and construction efficiency which results from the focus on this niche from the 1980's onwards.
  - The technology associated with the majority of ***very large*** steel ships for commercial applications is relatively simple, mature and well understood, and contracts are generally awarded on the basis of price and delivery times. As a result, global construction of ***very large*** steel ships has steadily migrated to lower cost countries – principally from Western Europe to Asia (South Korea, Japan and increasingly China) and to some extent Eastern Europe. Australian industry is not able to compete with the well-established, highly productive steel shipyards in Asia whose main threat comes from the rapidly expanding Chinese industry which has access to a large, low cost workforce and inexpensive land for the development of the necessary infrastructure.
  - There is a limited market for commercial steel ships which incorporate more sophisticated technology and require more specialist skills, such as dredgers, offshore support vessels and cruise ships. The demand for such vessels, however, is not expanding significantly whereas the capacity to produce them is, as shipyards that are becoming less cost competitive on simpler vessels (such as Japan and Korea) are pushing into these markets. The Australian aluminium shipbuilding industry itself faces this type of emerging competition as existing steel shipbuilders attempt to develop capabilities in aluminium.

  Competitiveness in the Global Naval Shipbuilding Market

  - Whilst the international naval sector requires sophisticated ships, the sophistication lies mainly in the design, installation and integration of

the ship's systems, and not in the construction of the ship's structure, which is within the capacity of most developed countries.

- This generally encourages nations, even those with limited shipbuilding capacity, to favour construction of naval vessels in a domestic shipyard even though this may result in a more costly, less timely solution. The justification for this is generally based on the twin notions of maximising local economic benefit/industry development and of strategic importance.
- In contrast, the ship's systems are usually acquired from the small group of suppliers with suitable systems – namely those based in the United States, Europe or Russia – and integrated by the suppliers themselves (or their local subsidiary companies) or other specialist companies (using supervised local labour for the less complex tasks).
- Of the small number of nations that have sufficient budgets to purchase and operate new, ***very large*** naval vessels, most have shipyards with the capability to construct the ship's structure (for example the US, UK, France, Italy and Holland). Therefore there are very few nations that would consider purchasing ***very large***, newly constructed naval vessels from overseas.
- By contrast, there are a large number of potential builders of ***very large*** naval vessels – particularly the ship's structure. Most of these builders would be able to produce the vessels within a similar or better cost and delivery time envelope than Australian industry could reasonably be expected to offer.
- For the reasons above, Austal does not consider that Australian industry could expect to secure export orders for locally-built ***very large*** naval ships. Therefore such an industry would not be sustainable in the long term without some form of government support[3] or an alternative ongoing use for the infrastructure and workforce.

[3] In the form of Government-funded contracts not open to international competition and/or subsidies or other direct fiscal support measures.

- There may, however, be opportunities for exporting expertise, specifically that involved in designing and managing the integration, installation, commissioning and maintenance of ship systems.

- In summary, Austal's view is that Australian industry does not currently have the capability to efficiently construct ***very large*** steel ships and, further, that such a capability would not be sustainable if it was established for a single upcoming naval program.

(b) The comparative economic productivity of the Australian shipbuilding industrial base and associated activity with other shipbuilding nations

- Australian shipbuilding is not cost competitive for the construction of commercial steel ships. This has been the case for some decades and has resulted in the demise of the industry despite (then) substantial government support.

- For the specialist area of aluminium vessels, Australian industry continues to be internationally competitive, although there is some erosion of competitiveness as foreign governments subsidise their industry to help them develop and sustain a competitive capability, particularly in Europe. The generally higher cost of labour in Australia is offset by Australian industry's superior design technology[4], manufacturing techniques, construction quality and established reputation.

- The existence of a world-competitive Australian supply chain of local manufacturers for high speed aluminium vessels, producing specialist products including life-rafts, seating, windows and interior panelling, also assists Australian industry's overall competitiveness.

[4] Australian design technology has been exported for many years. For example, the vast majority of the United States fast ferry fleet is made up of Australian designs built at US shipyards.

(c) The comparative economic costs of maintaining, repairing and refitting large naval vessels throughout their useful lives when constructed in Australia vice overseas

- Austal has direct experience in maintaining, repairing and refitting vessels built by Austal and other shipyards both locally and overseas. Based on this experience we offer the following observations:
    - Our experience indicates that Austal is most competitive for work of a specialist nature on Austal-built vessels. This is attributable to our familiarity with the detail of the ship's systems arising from the involvement in the vessel's design and construction. As a result we routinely carry out work on Austal vessels operating overseas despite the presence of local contractors with the necessary personnel and equipment to undertake the work.
    - In some circumstances we are competitive for work on specialist systems installed on similar vessels built by other shipyards.
    - Where a vessel requires support overseas, Austal cannot be competitive for relatively simple metal fabrication, interior fitout, painting etc. As there are no specialist skills required, this work can be accomplished at similar or lower costs by local contractors.
- Austal's views relating to the costs of maintaining, repairing and refitting large naval vessels are thus:
    - The maintenance of the major and minor mechanical and electronic components of any ship owned by the Royal Australian Navy should almost always be carried out in Australia, and there should only be limited requirements to return mechanical and electronic items to a foreign OEM.
    - It is likely that work not requiring specialist skills or infrastructure could be accomplished equally well in Australia or overseas. The relative total costs will depend mostly on the extent of the work to be undertaken and the costs associated with any requirement for vessel re-location.

- The costs of carrying out work on specialist systems will be more dependent on the availability of suitable expertise and familiarity with those systems. Thus Australian industry involvement in the specification, design, manufacture, installation and commissioning of such systems will be a major determinant in the comparative economic costs of carrying out this work in Australia or overseas. This particularly applies to systems that are specifically designed or modified for Australian use.

(d) The broader economic development and associated benefits accrued from undertaking the construction of large naval vessels

- Austal believes that the construction of ***very large*** naval vessels may have negative effects on the existing shipbuilding industry, specifically through the pressure such activities would have on the existing skilled workforce (both trades and professional) that has largely been responsible for the success of the existing industry. The labour resource is currently under very significant pressure and, in Austal's case, is restricting the company's ability to undertake new projects. Without a significant increase in the availability of relevant skilled labour, additional pressure on wages and loss of skilled workers may significantly erode the competitive advantage that Australia's aluminium shipbuilding industry currently possesses.

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